

Memorandum

DATE: September 19, 2006

REPLY TO

ATTN OF: Office of Energy Efficiency and Renewable Energy,
Federal Energy Management Program (FEMP), EE-2L

SUBJECT: Reporting Guidance for FY 2006 Annual Report on Federal Government Energy Management and Conservation Programs

TO: Federal Agency Energy Coordinators

Background

This purpose of this memo is to communicate Federal agencies' requirements and due dates for annual reporting on energy management activities mandated by the National Energy Conservation Policy Act (NECPA), Energy Policy Act of 2005 (EPACT '05), and Executive Order (E.O.) 13123 *Efficient Energy Management*. FY 2006 is the first year for reporting under the new goals and requirements of EPACT '05. The Department of Energy's (DOE) Federal Energy Management Program (FEMP) has prepared this reporting guidance to address the new requirements while minimizing the reporting burden placed on agencies.

Differences between E.O. and EPACT '05 Goals

The Energy Policy Act of 2005 establishes new annual energy reduction goals of 2 percent per year for the years 2006 through 2015. These annual goals measure performance against a 2003 base year. Currently, the following energy reduction goals of Executive Order 13123 are still in effect:

- 35 percent reduction in 2010 for agency-designated Standard Buildings
 - 1985 base year
- 25 percent reduction in 2010 for Industrial/ Laboratory/Energy Intensive Facilities
 - 1990 base year

Addressing Reporting Burden

EPACT '05 makes no distinction between Standard Buildings and Energy Intensive Facilities in measuring performance toward its annual goals. To address agency concerns regarding burdensome data management activities required to maintain multiple baselines for differing facility sector definitions under EPACT '05 and E.O. 13123, FEMP will cease annual tracking and not require agency reporting against E.O. goals until 2010, the next target year for E.O. goals. FEMP will maintain agency 1985 and 1990 baseline data for Standard Buildings and Energy Intensive Facilities and provide future guidance for reporting on the E.O. 13123 goals for 2010.

Assessing FY 2003 Baseline Data

Attachment 2 to this memo contains instructions regarding the assessment of FY 2003 energy data for EPACT '05 reporting. Agencies are receiving with this Guidance their FY 2003 energy consumption, costs, and square footage data currently residing in FEMP's database and are asked

to assess their FY 2003 data and provide necessary revisions to comport with EPACT '05 reporting. Any necessary revisions should be provided to FEMP with the FY 2006 reporting package or before.

Excluded Facilities

Most baseline revisions will result from agencies determining which facilities are considered Excluded under EPACT '05 and transferring facilities which were formerly Exempt under E.O. 13123 to either the EPACT Goal-Subject category or the EPACT Excluded category. The guidance for excluding buildings from the EPACT '05 goals has been finalized and is available of FEMP's website: http://www.eere.energy.gov/femp/pdfs/exclusion_criteria.pdf

Reporting Options

In submitting their FY 2003 baseline and FY 2006 energy data, agencies have the option of reporting formerly-designated Standard Buildings and Energy Intensive Facilities separately as in the past or already combined. The Data Report spreadsheet has been modified to accommodate this option.

Renewable Energy

Measuring progress toward the new renewable energy goals of EPACT '05 does not begin until FY 2007. The renewable energy goal for FY 2006 will be the same as it was for FY 2005; that the equivalent of 2.5 percent of electricity consumption from Federal facilities should come from new renewable energy sources. Beginning in FY 2006, agencies should begin reporting the following types of renewable energy projects in anticipation of the new EPACT '05 goals:

- Ocean Energy – including tidal, wave, current and thermal.
- Incremental Hydropower – new hydroelectric generation capacity achieved from increased efficiency or additions of new capacity at an existing hydroelectric project.

Guidance on the new renewable energy goals under EPACT '05 beginning in FY 2007 will be forthcoming.

Since the issuance of Executive Order 13123 and through FY 2005, purchases of renewable energy were subtracted from agency facility energy consumption when measuring goal progress in Btu-per-gross-square-foot. During FY 2006, agencies will continue to receive credit toward their energy reduction goal for renewable energy purchases. Purchases of renewable energy in FY 2003 however, will not be subtracted from agency base year data.

Purpose of Reporting

Information and data collected from the agencies will be used to develop DOE's FY 2006 *Annual Report to Congress on Federal Government Energy Management and Conservation Programs*. This report is required under Section 548 of NECPA and describes energy management activities in Federal facilities and operations and progress in implementing the requirements of NECPA, EPACT '05, and Executive Order 13123. Final distribution of the report includes the House Committees on Appropriations, Energy and Commerce, Government Reform, and Science, as well as the Senate Committees on Appropriations, Energy and Natural Resources, and Homeland Security and Governmental Affairs. In addition to the distribution indicated above, data contained in the annual report are provided to other Federal agencies, including the Bureau of Economic Analysis and Energy Information Administration; State and local governments; private companies and citizens, and non-government organizations.

OMB Interest in Energy Efficiency Funding

In a related reporting action through agency budget offices, OMB Circular A-11 requires reporting on the funding that agencies request to implement energy efficiency measures. In addition to reporting on funding requested to implement Executive Order 13123, Circular A-11 also requires reporting on funding requested to carry out Executive Order 13149 on Federal Fleet and Transportation Efficiency. Agency budget offices will be contacted by OMB with details on this requirement. More information on this separate reporting action can be found at http://www.whitehouse.gov/omb/circulars/a11/current_year/s25.pdf. Links to PDF instructions and the Excel template spreadsheet is embedded in Table 1 in OMB Circular A-11 Section 25.

Reporting Package Due Date

As directed by Executive Order 13123, the following items are required to be submitted to DOE by **January 1, 2007**:

- (1) FY 2006 Agency Annual Report on Energy Management. This includes the Annual Energy Management Data Report with energy consumption and cost data for 2006 and required narrative.
- (2) FY 2006 Federal Agency Energy Scorecard. DOE will forward Agency Scorecards directly to the Deputy Director of Management at OMB as required under Executive Order 13123.
- (3) FY 2007 Agency Energy Management Implementation Plan.

Reporting Guidance and Attachments

The Reporting Guidance for the FY 2006 Annual Report on Federal Agency Energy Management (Attachment 1 to this memo) provides an outline for what should be included in each agency's narrative report. This guidance references more detailed guidelines and documents that are not included, but are available on FEMP's web site at: www.eere.energy.gov/femp/about/legislation.cfm.

As noted above, Attachment 2 comprises instructions and an accompanying agency data worksheet for assessing agency FY 2003 energy data for EPACT '05 baseline foundation.

A blank Annual Energy Management Data Report and instructions for completing the form comprise Attachment 3 to this memo. Electronic versions of data and reports are encouraged in addition to official paper submissions. An electronic version of the Energy Management Data Report in Excel is available on FEMP's web site at www.eere.energy.gov/femp/about/reporting_guidance.cfm.

The blank FY 2006 Federal Agency Energy Scorecard is included as Attachment 4 of this reporting guidance. OMB will use the FY 2006 Energy Scorecard to evaluate agencies' progress toward meeting the goals of Executive Order 13123. The information required on the Scorecard is summary level data that agencies will have already compiled for their other reports.

Attachment 5 to this memo contains guidance for agencies to use in developing their FY 2007 Annual Energy Implementation Plan, required by the Executive Order 13123. The FY 2007

Implementation Plan should be prepared as a stand-alone document and submitted with the Annual Report by January 1, 2006.

A unit conversion chart comprises Attachment 6 to this memo. This should be useful reference for agencies when preparing their annual reports.

Point of Contact

The requested information should be sent to:

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If you have any questions, please contact Rick Klimkos at (202) 586-8287. Thank you for your cooperation and diligence in promoting energy efficiency. With your help, we can achieve the President's energy efficiency goals and save taxpayer dollars.

Rick Khan
Program Manager
Federal Energy Management Program
Office of Energy Efficiency and Renewable Energy

Attachments:

Attachment 1	Reporting Guidance for FY 2006 Federal Agency Annual Report on Energy Management
Attachment 2	Instructions for Assessing FY 2003 Energy Data for EPACT '05 Baseline Foundation
Attachment 3	Annual Energy Management Data Report
Attachment 4	Federal Agency Energy Scorecard for FY 2006
Attachment 5	Guidance for Preparing the Federal Agency Energy Management Implementation Plan for FY 2007
Attachment 6	Reporting Units and Conversion Factors for Federal Energy Management Reporting

ATTACHMENT 1

Reporting Guidance for FY 2006 Federal Agency Annual Report on Energy Management

OUTLINE AND INSTRUCTIONS FOR THE ANNUAL REPORT

- I. MANAGEMENT AND ADMINISTRATION.** This section will describe (1) the agency's establishment of an energy management infrastructure and (2) the agency's use of management tools to implement Executive Order 13123.

A. Energy Management Infrastructure

- 1. Senior Agency Official.** Identify the agency's senior energy official and describe the official's role and responsibilities.
- 2. Agency Energy Team.** Identify the members of the team and describe the team's responsibilities.

B. Management Tools

- 1. Awards (Employee Incentive Programs).** Describe the agency's use of employee incentive programs to reward exceptional performance in implementing Executive Order 13123.
- 2. Performance Evaluations.** Describe agency efforts to include successful implementation of provisions of Executive Order 13123 in the position descriptions and performance evaluations of senior energy officials, members of the agency energy team, heads of field offices, and facility/energy managers.
- 3. Training and Education.** Describe activities undertaken to ensure that all appropriate personnel receive training for energy management requirements. (Note: The number of employees trained will be reported on the agency's Data Report and Energy Scorecard. Expenditures on training will also be reported on the Data Report). Describe agency outreach programs that include education, training, and promotion of ENERGY STAR[®] and other energy efficient and low standby power products for Federal purchase card users.
- 4. Showcase Facilities.** Highlight each new or existing facilities that the agency has designated Showcase Facilities in FY 2006. Describe why the facilities are considered Showcase Facilities (i.e., discuss the facility design, the improvements made in energy or water efficiency, the use of renewable energy, etc.).

- II. ENERGY EFFICIENCY PERFORMANCE.** This section will highlight data calculated for reporting on the Data Report and the Energy Scorecard. The purpose of the section is to provide narrative information in support of these data.

A. Energy Reduction Performance

- 1. Goal Subject Buildings.** Report energy use for buildings in units of Btu-per-gross-square-foot (Btu/GSF) for FY 2003 (the base year) and FY 2006. Report the percent change from FY 2003 and from FY 2006. (Note: This information will be reported on the agency's Energy Scorecard). Discuss any extenuating factors that may be skewing the accuracy of this performance measure.

Site-Delivered vs. Source Energy—The factors used for converting the reporting units to Btu have a significant impact on how performance toward the energy efficiency goals and other goals of E.O. 13123 are measured. “Energy use” is defined as the energy that is used at a building or facility and measured in terms of energy delivered to the building or facility. Recognizing this, OMB and DOE will use Btu based on the site conversion factors for both electricity and steam as the primary measure of performance. However, because carbon emissions are generally proportional to source energy use, reductions in source Btu will also be considered more seriously than in the past.

The conversion factor for electricity of 3,412 Btu per kilowatt hour, the rate of consumption by the end-user on site, will be used for measuring performance. The difference between the site conversion rate and the estimated source conversion rate of 11,850 Btu per kilowatt hour is attributable to conversion losses associated with electric generation, as well as losses from transmission and power plant use. The site conversion factor for purchased steam is 1,000 Btu per pound. Generation inefficiencies and distribution losses are included in the source conversion factor of 1,390 Btu per pound.

Leased Space—Each agency that controls its Federally-owned building space or directly pays the utilities in its leased space will report to DOE the agency’s aggregate energy consumption for various fuel types (see Data Report instructions). Reporting on leased buildings may pose some difficulty depending on the nature of the lease (partially serviced, fully serviced). In cases where an agency is responsible for paying utility bills for space that is leased, the agency is expected to report energy consumption for the leased space to DOE. If an agency is leasing from the General Services Administration, GSA is responsible for reporting.

Delegated Space—Agencies that have been delegated responsibility by GSA for operation and maintenance of buildings they occupy are required to report, to DOE, energy consumption for these buildings during the years the buildings are under their control. An agency should *not* adjust the FY 1985 baseline to reflect the addition of buildings delegated by GSA if those buildings were not under the agency’s control during the base year period. The FY 1985 consumption and square footage of any building delegated after FY 1985 is included in GSA’s FY 1985 baseline. To also include this square footage and consumption in the agency’s baseline would result in double reporting. The impact of delegation activity on the Btu/GSF rates of most agencies should be minimal. In cases where building delegations account for a large increase in the percentage of an agency’s building inventory and its Btu/GSF is greatly impacted, this situation will be documented in the text of DOE’s Annual Report to Congress.

2. Excluded Facilities. Refer to Section IV D—a list of excluded facilities and an explanation of why they were exempted. (Refer to DOE’s *Criteria Guidelines Establishing Criteria for Excluding Buildings from the Energy Performance Requirements of Section 543 of the National Energy Conservation Policy Act as Amended by the Energy Policy Act of 2005*. These guidelines fulfill the requirement under Section 543(c)(3) of NECPA as amended by EPACT ’05. Section 543(c)(3) states that the Secretary of Energy shall issue guidelines that establish criteria for exclusions from the energy performance requirement for a fiscal year, any Federal building or collection of Federal buildings, within the statutory framework provided by the law. These guidelines were developed through an interagency working group process under the auspices of the Federal Interagency Energy Management Task Force which subsequently concurred with the final product. See: http://www.eere.energy.gov/femp/pdfs/exclusion_criteria.pdf.

3. Non-Fleet Vehicle and Equipment Fuel Use. Refer to the Data Report to identify the fuel use for non-fleet vehicles and other equipment not captured by the Federal Automotive Statistical Tool (FAST) reporting system. Discuss trends in the use of each type of fuel and methods employed to reduce fuel use.

Vehicle Fleet Consumption—In the past, GSA’s Agency Report of Motor Vehicle Data (Form SF-82) collected acquisition, fuel consumption, and fuel cost data for motor vehicles directly from vehicle fleet managers. The SF-82 was replaced by the Federal Automotive Statistical Tool (FAST), an internet-based reporting platform. FAST eliminates the need to report fuel consumption data for fleet motor vehicles to FEMP on the Data Report. FAST now collects this data, including alternative fuel consumption data reported under Sections 303 and 308 of EPACT, and this information is forwarded to FEMP for inclusion in the Annual Report to Congress. For more information on FAST, please contact Shab Fardanesh of DOE’s Federal Energy Management Program at (202) 586-7011.

B. Renewable Energy. Discuss agency’s policy and efforts to encourage purchase and generation of electricity and thermal energy from renewable energy sources. (Note: The quantitative information related to this section [see below] will be reported on the agency’s Data Report and Energy Scorecard. On the Energy Scorecard, self-generated renewable energy use and purchased renewable energy use will be aggregated into a single value). The Federal Renewable Energy Working Group released three clarifying guidance documents related to the renewable energy goal:

- Clarifications to EO 13123 Reporting Guidance for Annual Reporting on Renewable Energy
- EO 13123 Renewable Power/REC Procurement Guidance
 - FY05 Renewable Power/REC Procurement Guidance: Third Party Verification

These documents are available at:

http://www.eere.energy.gov/femp/technologies/renewable_workinggroup.cfm

1. **Self-generated renewable energy.** Identify/estimate energy use from electricity self-generated from renewable sources (photovoltaics, wind turbines) and renewable energy thermal projects (solar thermal, biomass, geothermal). Also report energy generated on Federal lands or by projects facilitated by your agency, but which may be sold to other parties. Agencies should report the annual energy generated from all renewable energy systems installed after 1990 and in place during FY 2006.
2. **Purchased renewable energy.** Identify the renewable (i.e., wind, solar, geothermal, biomass) energy component of power purchases under competitive contract in megawatt-hours. Agencies should report what portion of total purchased renewable energy should be applied to goal-subject buildings or excluded facilities. (Note: Guidelines for counting renewable energy projects and purchases of electricity from renewable energy sources toward agency progress in reaching their goals and information on the Federal renewable energy goal are available on the FEMP web site www.eere.energy.gov/femp/pdfs/eoguidancedoc.pdf.)

C. Petroleum. Identify petroleum-based fuels (fuel oil, LPG/propane) used in buildings in FY 2003 and in FY 2006 and the percentage change from FY 2003. (Note: The FY 2006 data will be reported on the Data Report and the Energy Scorecard).

D. Water Conservation. Identify/estimate water consumption and cost by the agency in FY 2006 and outline any agency-specific issues related to collection of water consumption data. (Note: This information will be reported on the Data Report and the Energy Scorecard.) Also in this section, highlight activities undertaken to improve water efficiency. Discuss progress

in developing Water Management Plans and implementing Best Management Practices for efficient use of water. For more information, refer to DOE's *Guidance to Establish Water Efficiency Improvement Goal for Federal Agencies* on the FEMP website www.eere.energy.gov/femp/pdfs/eoguidancedoc.pdf.

III. IMPLEMENTATION STRATEGIES. The purpose of this section is to identify and describe the use of strategies to reduce energy consumption and improve energy efficiency. It is not expected that each agency will have employed every strategy; rather, each strategy identified in Executive Order 13123 is listed below to remind agency officials of the existence of these strategies and to encourage their use where practical and life-cycle cost effective. Agencies should provide highlights of the following strategies their energy management programs employed during FY 2006:

- Life-Cycle Cost Analysis
- Facility Energy Audits
- Financing Mechanisms
 - Energy-Savings Performance Contracts (ESPCs)
 - Utility Energy Services Contracts (UESCs).
- Use of ENERGY STAR[®] and Other Energy-Efficient Products
- ENERGY STAR[®] Buildings
- Sustainable Building Design
- Energy Efficiency in Lease Provisions
- Industrial Facility Efficiency Improvements
- Highly Efficient Systems, i.e., combined cooling, heating, and power
- Distributed Generation
- Electrical Load Reduction Measures

IV. DATA TABLES AND INVENTORIES. Include the items listed below in the order given.

A. Assessment of FY 2003 Energy Data for EPACT '05 Baseline Foundation. An agency-specific work sheet with FY 2003 energy data accompanies this Guidance which agencies should use to submit any necessary revisions pertaining to building inventory changes or data inaccuracy.

B. FY 2006 Annual Energy Management Data Report. A blank Data Report form and instructions for completing the form are included as Attachment 3 of this Guidance. Also include Data Reports for revisions to past years' energy data along with an explanation

C. Energy Scorecard for FY 2006. A blank Scorecard is included as Attachment 4 of this Guidance.

D. Excluded Facilities Inventory. This should include the following information: building name, building location (city and state), and justification for excluded status under the criteria developed for EPACT '05: http://www.eere.energy.gov/femp/pdfs/exclusion_criteria.pdf.

V. ATTACHMENT. Attach a FY 2007 Implementation Plan to this FY 2006 Annual Report. See Attachment 5, *Guidance for Preparing the Federal Agency Implementation Plan for FY 2007*.

ATTACHMENT 2

Assessment of FY 2003 Energy Data and EPACT '05 Baseline Foundation

**(See accompany file with your specific agency's FY 2003 energy data:
"[Agency] 2003 Baseline.xls")**

ASSESSMENT OF FY 2003 ENERGY DATA AND GUIDANCE FOR ESTABLISHING THE BASELINE FOR THE GOALS UNDER THE ENERGY POLICY ACT OF 2005

Background

The Energy Policy Act of 2005 (EPACT '05) establishes new annual energy reduction goals for the years 2006 through 2015. These annual goals measure performance against a 2003 base year. Currently, the energy reduction goals of Executive Order 13123 are still in effect. These goals for agency-designated Standard Buildings and agency-designated Industrial/ Laboratory/Energy Intensive Facilities each have goals for 2010 compared to base years of 1985 and 1990 respectively. Further complicating reporting issues under the two authorities are the different distinctions EPACT 2005 and E.O. 13123 make regarding facility reporting sectors. The goal of this memorandum is clarify how the differing reporting requirements will be addressed and provide guidance to agencies in establishing their 2003 baseline.

Addressing Multiple Baselines/Conflicting Facility Sector Definitions

Agency representatives have expressed concern regarding burdensome data management activities required to maintain multiple baselines for differing facility sector definitions under EPACT '05 and E.O. 13123. Since E.O. 13123 does not establish annual performance goals (only goals for 2010), beginning with FY 2006, FEMP will not ask for annual tracking of E.O. 13123 goals and will only require agency reporting for these goals in 2010. FEMP will maintain agency 1985 and 1990 baseline data for Standard Buildings and Energy Intensive Facilities so that progress can be measured in 2010 and will provide guidance (if necessary) at that time for reporting on the E.O. 13123 goals.

Assessment of FY 2003 Energy Data and EPACT '05 Baseline Foundation

Attached for your review is an Excel workbook containing your agency's FY 2003 energy consumption, costs, and square footage data as it currently resides in FEMP's database. The sheet titled "2003 Existing" in the workbook displays your agency's facility data three different ways:

1. Consumption, costs, and square footage as reported under E.O. 13123 reporting categories (white-background data table)
2. Default consumption, costs, and square footage for EPACT '05 reporting categories where E.O. 13123's Standard and Energy-Intensive facility categories are combined to become EPACT's Goal-Subject facilities and E.O. 13123's Exempt facilities become EPACT Excluded facilities. (green-background data table)
3. Consumption, costs, and square footage for all agency facilities combined (yellow-background data table)

The second sheet in the workbook is titled "2003 Blank (for revisions)" and is intended for use by the agency in providing their 2003 EPACT '05 baseline data to FEMP. Most revisions will result from agencies determining which facilities are considered Excluded under EPACT '05 and transferring facilities which were formerly Exempt under E.O. 13123 to either the EPACT Goal-Subject Category or the EPACT Excluded category.

The guidelines for excluding buildings from the EPACT '05 goals can be found here:

http://www.eere.energy.gov/femp/pdfs/exclusion_criteria.pdf. Agencies must provide DOE with a list of the buildings or structures being excluded in the FY 2003 base year, including each building's identity and location along with documentation of the four criteria necessary for excluding buildings. The criteria documentation is not necessary if the structure or process is assumed to be excluded from the goals because it does not strictly qualify as an operating Federal building.

In submitting their FY 2003 baselines, agencies have the option of reporting formerly-designated Standard and Energy Intensive facilities separately as in the past and letting the spreadsheet combine

them or they may overwrite the formulas in the EPACT Goal-Subject data table and report their data already combined.

The yellow-background data tables showing all facilities combined are intended for use by agencies for comparing their revisions to the formerly-reported data. Ideally, these tables on each of the two worksheets should match. If they don't match, the agency should provide an explanation as to why overall facility consumption changed from previous reporting.

If possible, please provide appropriate revisions to your FY 2003 base year energy data to FEMP prior to the submittal of your FY 2006 annual energy reporting package on January 1, 2007.

ATTACHMENT 3

FY 2006 Energy Management Data Report and Accompanying Instructions

**(See separate file: DataReport06.xls
for 5-page Data Report)**

INSTRUCTIONS FOR PREPARING THE FY 2006 ANNUAL ENERGY MANAGEMENT DATA REPORT

What is the purpose of this information?

Executive Order 13123 and EPACT '05 require agencies to track and reduce their energy use in buildings and facilities. Part 3 of E.O. 13123 requires agencies to include budgetary information on energy use and efficiency in their budgets and sets out requirements for an annual report to the President on progress toward the energy efficiency goals.

How will this information be used?

The Department of Energy (DOE) will review and aggregate the numerical data and other information included in the report to Congress to ensure the progress of each agency and to provide a government-wide picture of progress toward the mandated goals.

Do I need to report on energy use, costs, and efficiency?

If your agency controls its Federally-owned building space or directly pays the utilities in its leased space, then you must report your agency's aggregate energy consumption for each of the fuel types listed below. Reporting on leased buildings may pose some difficulty depending on the nature of the lease (partially serviced, fully serviced). If your agency leases space from the General Services Administration, GSA is responsible for reporting energy data for that space. If all of your space is leased from GSA, and if you do not pay any energy surcharges, then you do not have to report any data in this section.

If your agency has been delegated responsibility by GSA for operation and maintenance of the buildings you occupy, then you are required to report energy consumption for these buildings for any years in which the buildings are under your control.

You must complete the applicable tables shown in the Data Report. Part 1 consists of seven tables concerning energy consumption and cost data. Part 2 consists of five tables concerning energy efficiency improvements.

If your energy or water bills have different units of measurement from the ones required here, you must convert the data. For conversion units not given in the explanations for individual sections, refer to Attachment 5 of this reporting guidance (which includes conversion tables).

(a) Tables 1-1, (1-1(a) and 1-1(b)) and 1-2

The Data Report has been revised this year to accommodate reporting against the EPACT '05 reduction goals. Agencies have the option of reporting formerly-designated Standard Buildings and Energy Intensive facilities separately as in the past or already combined into the EPACT Goal Subject category. Those agencies wishing to continue tracking progress of these facility sectors separately may enter the consumption, cost, and square footage data in Tables 1-1(a) and 1-1(b) to the right of Table 1-1. Formulas in Table 1-1 will automatically combine the data from the two facility sectors in the appropriate cells. FEMP will maintain the disaggregated data in its historical database for use by the agencies in the future or for specialized analyses. Those agencies that wish to report EPACT Goal Subject buildings already combined can simply enter their data in the cells of Table 1-1, overwriting the formulas.

For each category of buildings and facilities (EPACT Goal Subject Buildings, Excluded Facilities), report how much of each of the following types of energy your agency used and how much you spent for that type of energy. If you know only one of these numbers, report that and the Department of Energy will estimate the other value based on the average national cost of each form of energy.

You must submit all data in the reporting units shown below for each energy type. For each quantity of energy consumed, round to the nearest tenth of an integer, (i.e., 1,289.3 megawatt hours). For cost data, enter the annual cost for each energy type in thousands of dollars, rounded to the nearest tenth of an integer, (e.g., \$77.4 for \$77,358).

<i>Energy type</i>	<i>Reporting unit</i>
Electricity	(megawatt hours)
Fuel oil	(thousands of gallons)
Natural gas	(thousand cubic feet)
LPG/propane	(thousands of gallons)
Coal	(short ton)
Purchased steam	(billion Btu)
Other	(billion Btu)

If you were able to enter cost data for all types of energy you used, then total the annual costs and enter that number, in thousands of dollars, in the space provided.

Report the gross square footage of the buildings and facilities in your agency's inventory for each reporting category. Enter this number in thousands of square feet, rounded to nearest tenth of an integer.

(b) Table 1-3. Non-fleet vehicles and other equipment.

Table 1-4 includes information on the fuel use of non-passenger vehicles and equipment and non-vehicle engines like mobile generators that is not captured by the Federal Automotive Statistical Tool (FAST) reporting system. For all liquid engine fuels, report your agency's total use in thousands of gallons of each type of fuel listed in the Data Report. If you used significant quantities of a fuel not listed, report its use in billions of Btu. (See the detailed FEMP reporting guidance for conversion tables if necessary.)

(c) Table 1-4. Water consumption, cost, and efficiency measures.

If your water bills have different units of measurement from the ones required here, you must convert the data. For conversion units, refer to the detailed FEMP reporting guidance which includes conversion tables.

(d) Table 1-5. Renewable Energy/Renewable Energy Certificate Purchases

Federal agencies have opportunities to purchase renewable energy from utilities as part of "green power" pricing programs. More recently, Renewable Energy Certificates (or "Green Tags") have become available, allowing agencies to purchase only the renewable component of electricity that might be used elsewhere. Your agency will get credit toward meeting the goals of E.O.13123 by distinguishing renewable energy purchases from conventional purchases, and reporting the portion of energy attributable to renewable sources.

Renewable energy purchased should be captured on the totals in Tables 1-1, 1-2, or 1-3 of this data report, but in order for your agency to receive credit for these purchases toward the energy reduction, greenhouse gas reduction, and renewable energy goals, you must report the following information for *each* renewable energy/renewable energy certificate purchase on Table 1-6. It may be necessary to insert additional rows into Table 1-6 to account for every separate purchase.

- *Description of Each Renewable Energy Purchase.* For each purchase, provide a brief description of the type of renewable energy purchase, such as:
 - Electricity from a renewable source (green power)
 - Renewable Energy Certificates (RECs) (or "green tags")
 - Natural gas from landfill or biomass sources

- Renewable thermal energy (i.e., steam or chilled water generated from renewable sources)
- Other forms of purchased renewable energy (please describe)
- *Amount Purchased (MWH or MMBtu).* Report the amount of renewable energy or RECs purchased in the column with the appropriate measure, generally megawatthours for electricity or million Btu for other forms of energy. Report the amount for each purchase in either column, but not both, as this would result in double counting.
- *State or Region.* Report the state or region in which the renewable energy was generated. This is required so that FEMP can provide appropriate credit for greenhouse gas displaced.
- *Facility Type.* Report which facility end-use category the credit for the renewable energy purchase or RECs should be applied to, i.e., 1) for Standard Buildings, enter “Standard”; 2) for Industrial, Laboratory, Research, and Other Energy-Intensive Facilities, enter “EI” or 3) for Exempt Facilities, enter “Exempt”. By entering the category as indicated, the spreadsheet will sum the purchases to the appropriate category, and credit the purchases toward the Btu/Gross Square Feet figures in Tables 1-1, 1-2, and 1-3.

(e) Table 1-6. Self-generated renewable energy installed after 1990

In order to get credit toward the renewable energy goal, agencies must provide information on self-generated renewable energy from systems installed after 1990. Because this energy is not reported in Tables 1-1 or 1-2, it must be reported here to be counted toward the renewable energy goal. Agencies can count generation from renewable energy projects that use Federal land or resources if the agency played a role in facilitating a project’s development. Therefore, agencies should report the total energy generated by their projects (this is the amount that is credited toward the Federal goal). In addition, the agency should report the amount of this energy actually used by the agency, if excess generation is being sold to other entities.

(f) Table 2-1. Direct agency obligations.

These are obligations for energy or water efficiency incurred from appropriated funds, revolving fund accounts, or other accounts that belong to your agency; for example, obligations for purchases of compact fluorescent lights to replace incandescent bulbs, or replacement chillers paid for directly by your agency rather than through an energy savings performance contract. They do not include anything to be paid for or financed by a third party (e.g., a utility or energy-savings performance contractor). Report training data separately in table 2-5. Provide information on the funds your agency obligated or plans to obligate for each reporting year. Enter amounts in thousands of dollars rounded to the nearest tenth of an integer.

(g) Table 2-2. Energy savings performance contracts.

Energy savings performance contracts (ESPCs) are contracts that allow a private-sector energy services company (ESCO) to perform energy-efficiency improvements at a government facility using private financing, rather than the government paying for the work directly. The ESP contracts provide that the contractor guarantees a certain level of energy cost savings, and based on that guarantee, the government will pay the contractor over the agreed number of years amounts that cannot exceed the guaranteed savings in any year until the improvements have been paid off, including interest. Any negotiated performance period services provided by the ESP contractor, such as M&V and maintenance, are also paid for by the government over the term from within the guaranteed savings. ESPCs allow agencies to undertake more and larger efficiency improvements than their budgets might otherwise allow.

The first line of Table 2-2 will show the total number of new ESPC projects awarded by your agency during the reporting year. This includes delivery orders awarded under DOE Super ESPC blanket

contracts and Department of Defense agency blanket contracts as well as site-specific ESPCs and shared energy savings contracts awarded by the U.S. Postal Service. DOE will make available to agencies data on their activity under its Super ESPC contracts to assist in compiling this table. Report new ESPCs signed during the reporting year, in the “number/thou \$” column. (Agencies should treat major modifications to existing contracts/delivery orders as new task/delivery orders in cases where the modifications significantly add work, investment value, and savings.) On the same line, in the “MMBTU” column, enter the total of the average annual energy savings anticipated from all ESPC projects awarded during the year, in millions of site Btu.

On the second line, enter the total investment value of new ESPCs signed during the reporting year. The investment value of an ESPC task/delivery order is the implementation price (for survey, study, design, construction, commissioning to acceptance, and markup—which includes indirect costs, such as overhead and profit) an ESCO charges to develop and implement the project. Excluded are the government payments (from guaranteed savings) to the contractor during the performance period term for debt repayment (principal and interest) and services (M&V, maintenance, etc.) Also excluded are the government’s administration costs, which agency budget offices will identify on the Circular A-11, Exhibit 55 form.

On the third line, enter the amount privately financed as a result of new ESPCs signed during the reporting year. The amount privately financed under an ESPC task/delivery order is the permanent financing principal borrowed to implement the project. It equals the investment value, less any utility or systems benefit administrator rebates or incentives, less any government pre-performance period payments, and plus any capitalized interest costs (e.g., construction period interest).

On the fourth line, enter the cumulative guaranteed cost savings of all of the ESPCs you reported on the previous three lines. Each ESPC has a schedule of cost savings to energy and related O&M budgets guaranteed by the ESCO. From these schedules, enter the sum of each year’s guaranteed cost savings.

On the fifth line, report the sum of each awarded ESPC task/delivery order’s total award value (contract price). This is obtainable from the schedule of fixed contractor payments that will be used by the ESCO for debt repayment and performance period services. For the fourth and fifth lines, report the actual contract-negotiated guaranteed cost savings and contract prices in nominal costs. Do not discount each year’s amounts to the present year value.

The last line is the total amount your agency paid or will pay to ESPC contractors during the reporting year as a consequence of all ESPCs signed to date.

(h) Table 2-3. Utility energy services contracts.

Utility energy service contracts (UESCs) are similar to ESPCs, except the work is performed by utilities (electric or gas) serving your agency’s site. With a UESC, the utility arranges financing to cover all or a portion of the capital costs of the project. Then the utility is repaid over the contract term from the cost savings generated by the energy efficiency measures. These contracts can either be negotiated directly by the site, placed through an existing “area-wide agreement” the utility has with the General Services Administration, or established through a “basic ordering agreement” (more generally used by Department of Defense).

The first line of Table 2-3 will show the total number of new UESC projects awarded by your agency during the reporting year. Report only new UESCs signed during that year, in the “number/thou \$” column. On the same line, in the “MMBTU” column, enter the average annual site energy savings anticipated from the UESCs awarded during the year, in millions of site Btu.

On the second line, enter the total investment value of new UESCs signed during the reporting year. (See instructions for ESPCs above for clarification of investment value.)

On the third line, enter the amount privately financed as a result of new UESCs signed during the year. (See instructions for ESPCs above for clarification of amount privately financed.)

On the fourth line, enter the cumulative cost savings of all of the UESCs you reported on the previous three lines. Each UESC has a schedule of cost savings to energy and related O&M budgets estimated by the utility/contractor. From these schedules, enter the sum of each year's cost savings.

On the fifth line, report the sum of each awarded UESC's total award value (contract price). This is obtainable from the schedule of fixed payments that will be used by the utility for debt repayment and performance period services. For the fourth and fifth lines, report the actual contract-negotiated cost savings and contract prices in nominal costs. Do not discount each year's amounts to the present year value.

The last line is the total amount your agency paid or will pay to utilities/contractors during the reporting year as a consequence of all UESCs signed to date.

(i) Table 2-5. Training.

Enter the number of Federal personnel or on-site contractors in your agency who received or are expected to receive energy management training in each year, and also enter your expenditures (or budget) during each of those years for energy management training. When counting the number of people who received training, include only people who received organized instruction (i.e., seminars, workshops, conferences), not those who received general-information items like flyers reminding people to turn out lights and turn off computers. The cost of such general information items intended to raise energy awareness among all employees can be included in the training budget entries, however. Travel costs associated with this training should also be included in the cost of the training.

ATTACHMENT 4

Agency Energy Scorecard for FY 2006

(See separate file: Scorecard06.rtf)

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ATTACHMENT 5

Guidance for Preparing the Federal Agency Energy Management Implementation Plan for FY 2007

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Guidance for Preparing the Agency Energy Management Implementation Plan for FY 2007

The Implementation Plan should be formatted as described below. The format generally follows the outline for the Annual Report. Although the Implementation Plan will be submitted as an attachment to the Annual Report, the Plan should be considered a stand-alone document. Therefore, please do not refer to the Annual Report for Section I, Part A, or for any other part of the Plan that you feel may be redundant with the Annual Report. This Plan should be brief and should describe only activities planned for the next fiscal year.

I. Management and Administration. This section will describe (1) the agency's establishment of an energy management infrastructure and (2) the agency's plans to use management tools in implementing Executive Order 13123.

A. Energy Management Infrastructure

- 1. Senior Agency Official.** Identify the agency's senior energy official and describe the official's role and responsibilities.
- 2. Agency Energy Team.** Identify the members of the team and describe the team's responsibilities.

B. Management Tools

- 1. Awards (Employee Incentive Programs).** Describe the agency's plans to use employee incentive programs to reward exceptional performance in implementing Executive Order 13123.
- 2. Performance Evaluations.** Describe agency plans to include successful implementation of provisions of Executive Order 13123 in the position descriptions and performance evaluations of members of the agency energy team and facility/energy managers.
- 3. Training and Education.** Describe plans to ensure that all appropriate personnel receive training for energy management requirements. Describe plans to develop and implement agency outreach programs that include education, training, and promotion of ENERGY STAR[®] and other energy efficient products for Federal purchase card users.
- 4. Showcase Facilities.** Describe plans to construct or renovate exemplary facilities that the agency plans to designate as Showcase Facilities. Discuss why the facilities will be considered Showcase Facilities (i.e., discuss the facility design, the improvements made in energy or water efficiency, the use of renewable energy, etc.).

II. Implementation Strategies. The purpose of this section is to describe plans to use strategies to reduce energy consumption and improve energy efficiency. It is not expected that each agency will employ every strategy; rather, each strategy identified in Executive Order 13123 is listed below to remind agency officials of the existence of these strategies and to encourage their use where practical and life-cycle cost effective. Agencies should provide highlights of activities under the following strategies that they plan to employ during FY 2007:

- Life-Cycle Cost Analysis
- Facility Energy Audits
- Financing Mechanisms
 - Energy-Savings Performance Contracts (ESPCs)
 - Utility Energy Services Contracts (UESCs).
- Use of ENERGY STAR[®] and Other Energy-Efficient Products
- ENERGY STAR[®] Buildings
- Sustainable Building Design
- Energy Efficiency in Lease Provisions
- Industrial Facility Efficiency Improvements
- Highly Efficient Systems, i.e., combined cooling, heating, and power
- Distributed Generation
- Electrical Load Reduction Measures

ATTACHMENT 6

Reporting Units and Conversion Factors for Federal Energy Management Reporting

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REPORTING UNITS AND CONVERSION FACTORS FOR FEDERAL ENERGY MANAGEMENT REPORTING

Standard Buildings/Facilities

Industrial, Laboratory, and Other Energy-Intensive Facilities

Exempt Facilities

<i>Fuel Type</i>	<i>Reporting Units</i>	<i>BTUs per Reporting Unit</i>	<i>Joules per Reporting Unit</i>	<i>GigaJoules (GJ) per Reporting Unit</i>
Electricity	Megawatt Hour (MWH)	3,412,000	3,599,660,000	3.59966
Fuel Oil	1,000 Gallons	138,700,000	146,328,500,000	146.3285
Natural Gas	1,000 Cubic Feet	1,031,000	1,087,705,000	1.087705
LPG/Propane	1,000 Gallons	95,500,000	100,752,500,000	100.7525
Coal	Short Ton	24,580,000	25,931,900,000	25.9319
Purchased Steam	Billion Btu (BBtu)	1,000,000,000	1,055,000,000,000	1,055.0
Other	Billion Btu (BBtu)	1,000,000,000	1,055,000,000,000	1,055.0

Vehicles/Equipment

<i>Fuel Type</i>	<i>Reporting Units</i>	<i>BTUs per Reporting Unit</i>	<i>Joules per Reporting Unit</i>	<i>GigaJoules (GJ) per Reporting Unit</i>
Auto Gas	1,000 Gallons	125,000,000	131,875,000,000	131.875
Diesel	1,000 Gallons	138,700,000	146,328,500,000	146.3285
LPG/Propane	1,000 Gallons	95,500,000	100,752,500,000	100.7525
Aviation Gas	1,000 Gallons	125,000,000	131,875,000,000	131.875
Jet Fuel	1,000 Gallons	130,000,000	137,150,000,000	137.150
Navy Special	1,000 Gallons	138,700,000	146,328,500,000	146.3285
Other	Billion Btu (BBtu)	1,000,000,000	1,055,000,000,000	1,055.0

Other Conversion Factors

100 Cubic Feet (Ccf) = 748 Gallons	1 Liter = 0.264 Gallons	1 ton-hour of refrigeration = 12,000 Btu
1 Acre-Foot = 325,851 Gallons	1 Cubic Meter = 264 Gallons	